



LED Display

Product Data Sheet

LTP-2057AE-NB

Spec No.: DS-30-99-483

Effective Date: 06/29/2000

Revision: -

LITE-ON DCC

RELEASE

BNS-OD-FC001/A4

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FEATURES

- * 2.0 inch (50.8 mm) MATRIX HEIGHT.
- * LOW POWER REQUIREMENT.
- * SINGLE PLANE, WIDE VIEWING ANGLE.
- * SOLID STATE RELIABILITY.
- * 5x7 ARRAY WITH X-Y SELECT.
- * COMPATIBLE WITH USASCII AND EBCDIC CODES.
- * STACKABLE HORIZONTALLY.
- * CATEGORIZED FOR LUMINOUS INTENSITY.

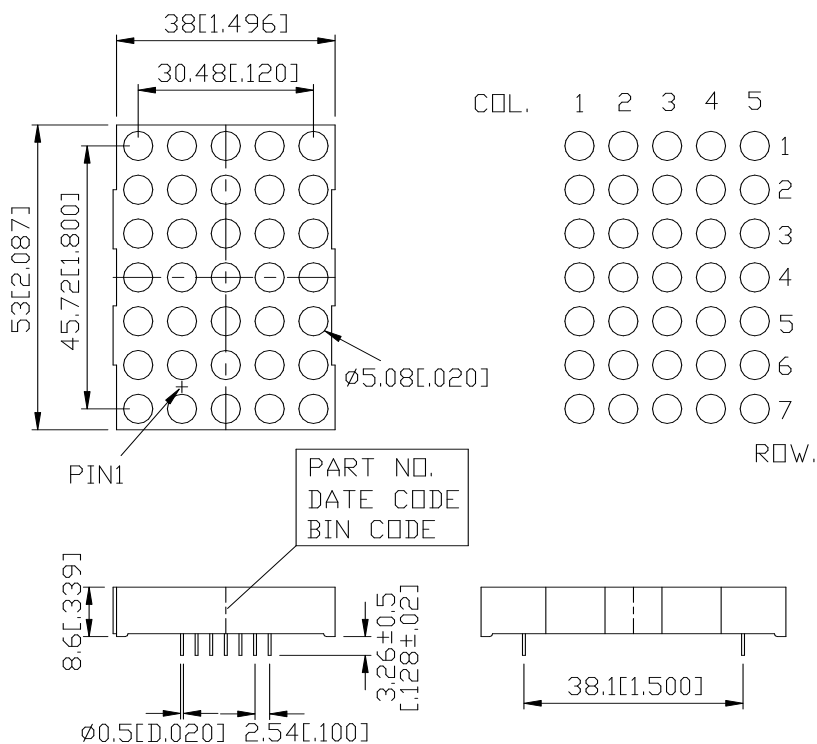
DESCRIPTION

The LTP-2057AE-NB is a 2.0 inch (50.8 mm) matrix height 5x7 dot matrix display. This device utilizes Red Orange LED chips, which are made from GaAsP on GaP substrate, and has a black face and white dot color.

DEVICE

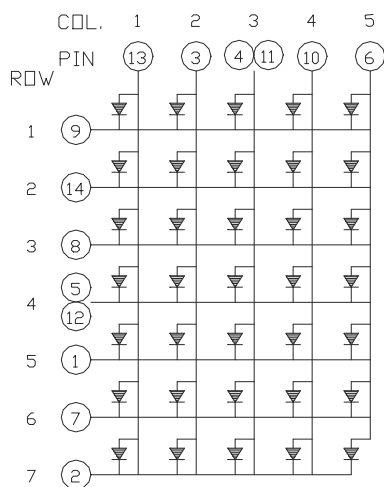
PART NO.	DESCRIPTION
Red Orange	ANODE COLUMN
LTP-2057AE-NB	CATHODE ROW

PACKAGE DIMENSIONS



NOTES: All dimensions are in millimeters. Tolerance is ± 0.25 mm (0.01") unless otherwise noted.

INTERNAL CIRCUIT DIAGRAM



PIN CONNECTION

No.	CONNECTION
1	CATHODE ROW 5
2	CATHODE ROW 7
3	ANODE COLUMN 2
4	ANODE COLUMN 3*1
5	CATHODE ROW 4*2
6	ANODE COLUMN 5
7	CATHODE ROW 6
8	CATHODE ROW 3
9	CATHODE ROW 1
10	ANODE COLUMN 4
11	ANODE COLUMN 3*1
12	CATHODE ROW 4*2
13	ANODE COLUMN 1
14	CATHODE ROW 2

NOTES : 1. Pin 4 & 11 are internally connected.

2. Pin 5 & 12 are internally connected.

ABSOLUTE MAXIMUM RATING AT Ta=25°C

PARAMETER	MAXIMUM RATING	UNIT
Average Power Dissipation Per Dot	36	mW
Peak Forward Current Per Dot	100	mA
Average Forward Current Per Dot	13	mA
Derating Linear From 25°C Per Dot	0.17	mA/°C
Reverse Voltage Per Dot	5	V
Operating Temperature Range	-35°C to +85°C	
Storage Temperature Range	-35°C to +85°C	
Solder Temperature: max 260°C for max 3sec at 1.6mm[1/16inch] below seating plane.		

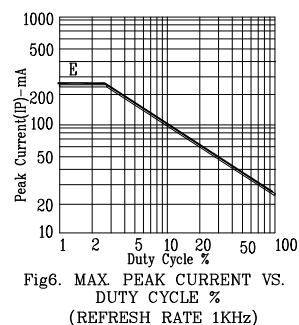
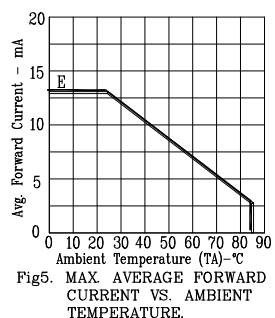
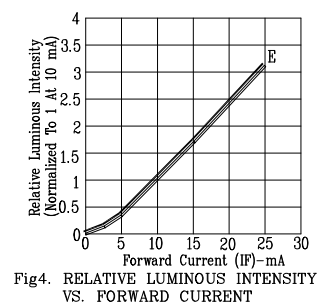
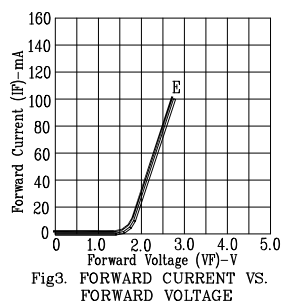
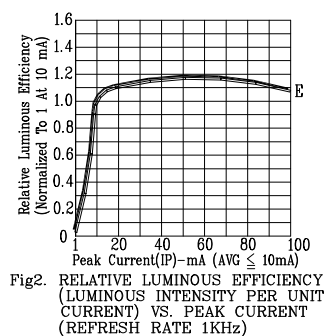
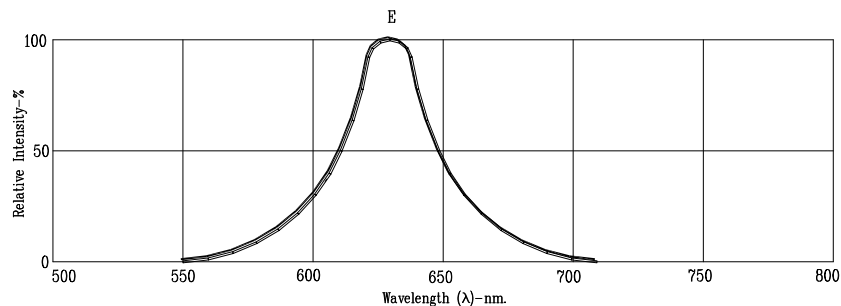
ELECTRICAL / OPTICAL CHARACTERISTICS AT Ta=25°C

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	TEST CONDITION
Average Luminous Intensity	I _v	1700	4800		μcd	I _p =80mA 1/16Duty
Peak Emission Wavelength	λ _p		630		nm	I _F =20mA
Spectral Line Half-Width	Δλ		40		nm	I _F =20mA
Dominant Wavelength	λ _d		621		nm	I _F =20mA
Forward Voltage any Dot	V _F		2.0	2.6	V	I _F =20mA
			2.6	3.4		I _F =80mA
Reverse Current any Dot	I _R			100	μA	V _R =5V
Luminous Intensity Matching Ratio	I _v -m			2:1		I _F =10mA

Note: Luminous intensity is measured with a light sensor and filter combination that approximates the CIE (Commision Internationale De L'Eclairage) eye-response curve.

TYPICAL ELECTRICAL / OPTICAL CHARACTERISTIC CURVES

(25°C Ambient Temperature Unless Otherwise Noted)



NOTE: E=RED ORANGE